

## **Fenestration**

Although natural light is not required, it is highly desirable in this space. East and west facing windows are to be avoided and no glare is to be permitted on computer screens. Exterior windows may require roller shades or other light control devices.

## **Finishes**

The finishes in this area will receive a great deal of wear and tear. The floor should be either a durable non-slip hard surface or a high quality anti-static carpet tile that can be replaced as needed. Any wall or casework surfaces should be highly resistant to marking and easily cleaned. All work counters should be attractive, with non-glare surfaces and rounded edges to reduce the possibility of injury to staff and patrons. Walls and columns require corner guards. The patron side of the desk should be mark resistant and incorporate a toe reveal to preserve the front of the desk.

### **CEILING:**

Acoustical tile

### **WALLS:**

Paint (Latex semi-gloss recommended); Vinyl, Sisal or Fabric wall covering

### **FLOOR:**

Anti-static carpet tile, Vinyl tile, Linoleum, Cork, Stone or unfinished quarry tile; Anti-fatigue mats at staff workstations

## **Access**

The Circulation Desk will be accessible by means of a 36" minimum aisle. The desk will contain no less than one accessible transaction counter located at a section of the counter that is no more than 28" to 34" high for a continuous length of 36". There is no requirement for knee clearance at checkout counters. If a self checkout system is provided, at least one must be accessible with a counter no higher than 28" to 34" high and a knee clearance of at least 19" of clear space. Signage will meet requirements as outlined in the Signage Space Detail.

## **Acoustics**

Since this space will be quite noisy because of patrons walking and talking, everything possible should be done to keep the noise generated in this area from spreading throughout the library. Adequate sound isolation must be provided through the use of acoustic ceiling, floor and wall treatment.

## **HVAC**

Separate temperature control is required. Comfort level to be set at 68° to 72° during heating and 78° during cooling for energy savings. Relative humidity at 30 – 50% and ventilation at 10 to 12 cubic feet per minute. HVAC vents should be located to avoid drafts on occupants.

## **Illumination**

Minimum of 40 to 50 foot candles of ambient light with additional non-glare task lighting up to 75 foot candles over the workstations. The Circulation Desk should be highlighted in order to help patrons find this service area. Signage should be illuminated for greater visibility. Lighting must not create a heat buildup. The master light controls for the library should be located here.

## **Telecommunications**

Provide one standard duplex communications outlet (one voice and one data) co-located with associated power distributed every 4' on the work counter and one standard quad communications outlet (two voice and two data) co-located with associated power at each workstation position.

## **Security**

The staff at the Circulation Desk supervises much of the public area just inside the entrance from the lobby. Access to patrons who are exiting the building after activating the inventory control system alarm is important. The staff should be able to see a major portion of the lobby, the entrances to the library, and the entrances to the Public Rest Rooms. If the library has a video surveillance system, the security monitors may be located at the Circulation Desk. If inventory control gates are included, they may be located here, at a minimum



distance of eight feet from the nearest electronic workstation. Alarms should be audible at the Circulation Desk.

### Signage

Required signage includes a well-lighted major area directional and identification sign which can be seen from the Lobby and Library Entrance. This directional sign ("Circulation Desk" or "Customer Service") must be wall-mounted or ceiling hung at least 80" high when suspended overhead on a path of travel and must have characters and numbers that are appropriately sized according to the viewing distance, but no less than 3" in height. Characters must have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10; must contrast with their background; and must be in a matte, eggshell, or other non-glare finish.

Signage requirements may include ceiling hung signs or desk bars, for designated service points, such as "Returns," "Patron Registration," and "Checkout" and a sign for any return slot. Changeable insert sign system is required for stack end panels for collections held behind the Circulation Desk. Shelf face sign carriers may be required.

Additional requirements include fire and life safety lighted exit signs, and may include a building floor directory or stack location map, visible pictogram flag signs for elevators or rest rooms, and an emergency evacuation map. Additional requirements include changeable and permanent information signs such as "Ask Me!" or "Internet Classes on Saturday."

### Furniture & Equipment and Shelving Units

	UNIT QTY	UNIT Sq. Ft.	EXTENDED Sq. Ft.
<u>Description of Furniture &amp; Equipment Units</u>			
Bar Code Reader, Fixed Mount	3	0	0
Bar Code Reader, Hand-Held	1	0	0
Book Bin, Depressible	1	0	0
Book Truck	2	10	20
Cabinets, Below Counter	6	0	0
Cash Register	1	0	0
Chair, Task	1	0	0
Clock	1	0	0
Computer, Staff Desktop	4	0	0
Printer, Laser (B&W)	2	0	0
Printer, Receipt	4	0	0
Queuing Space (Per Person)	10	6	60
Security System Book & Media Resensitizer	2	0	0
Security System Book Desensitizer	3	0	0
Security System Gates, Inventory Control	2	35	70
Security System Media Desensitizer	3	0	0
Shelving, SF 45"h Steel W/ 3 Shelves	3	12	36
Stool	2	0	0
Telephone Handset	2	0	0
Workstation, Circulation Check-In Counter	1	50	50
Workstation, Circulation Check-Out Desk	2	80	160
Workstation, Circulation Patron Registration Desk	1	80	80



**Functional Activity**

This is the office for the Circulation Supervisor where departmental activities will be planned and administered. This office will provide a private space where staff reviews can be conducted and where the public can come to discuss confidential issues regarding their circulation records.

**Occupancy**

STAFF OFFICE WORKSTATIONS: 1

**Relationships**

All of the circulation support staff should be easily supervised from this office which requires sight lines to the Circulation Desk. The office should be easily accessible from the Circulation Desk if problems arise with patrons. Patrons should be able to access the office without going behind the Circulation Desk or into any of the Circulation Division's back of house spaces.

**ADJACENT:**

Circulation Desk  
Circulation Workroom

**PROXIMITY:**

Public Entrance & Lobby

**Flexibility**

Sufficient flexibility should exist (prefer no load-bearing walls, HVAC independent of room walls) to allow the Circulation Desk to expand into this space if required in the future.

**Fenestration**

Interior windows, which allow supervision of the Circulation Desk and Circulation Workroom, are required. Interior windows require shades, etched glass, or roller blinds so the public can not see into this room. Natural light is desirable as long as it does not create glare on computer screens. Exterior windows in staff areas should be provided with roller shades or other light control devices. Staff areas may have operable windows.

**Finishes**

The circulation manager and the public will utilize this office daily. This position supervises all of the library's employees who also utilize this office frequently. The walls and carpet will not have the heavy use of public areas, but must maintain a quality appearance after many years of normal office use.

**CEILING:**

Acoustical tile

**WALLS:**

Paint (Latex semi-gloss recommended); Glass window; White board;  
Tackable surfaces

**FLOOR:**

Anti-static carpet with enhanced backing (No carpet pad permitted)

**Access**

The Circulation Office will be accessible by means of a 36" minimum aisle. The accessible aisle requirement is increased in increments of 1 ½" per 5' in distance to the nearest exit, cross aisle, or foyer. If an accessible aisle is less than 60" wide, then turning and passing spaces of 60" by 60" must be located at any obstruction and at reasonable intervals not exceeding 200'. Corridors which serve an occupancy load of 10 or more must be a minimum of 44" wide.

A 36" wide door with a minimum clearance of 32" is required. Interior doors can require no more than 5 pounds of pressure to operate with hardware mounted no higher than 48" above finished floor. Thresholds cannot exceed ½" in height. Signage will meet



requirements as outlined in the Signage Space Detail.

#### Acoustics

This office requires a high level of acoustical isolation for staff supervision, private conversations, or potential confrontations with irate patrons. A slab-to-slab full height partition is required to achieve speech privacy. Ceiling tile must have a high sound isolation rating, and other sources of sound penetration including recessed electrical boxes, doors, window mullions and thickness of glass, and ceiling system must be addressed. A sound masking system may be necessary to achieve full speech privacy level.

#### HVAC

Separate temperature control is required. Comfort level to be set at 68° to 72° during heating and 72° to 78° during cooling for energy savings. Relative humidity at 30 to 60% and ventilation at 10 to 12 cubic feet per minute per person with 3 to 10 air exchanges per hour. HVAC vents should be located to avoid drafts on occupants.

#### Illumination

Minimum 30 to 40 foot candles of ambient light supplemented by task lighting providing at least 50 foot candles at the workstation. Standard non-glare office lighting, such as deep-cell parabolic fluorescent fixtures with semi-specular aluminum louvers, is acceptable.

#### Telecommunications

Provide one standard quad communications outlet (two voice and two data) co-located with associated power at the primary workstation location, mounted on the wall 6" above the desk or 15" above the finished floor; and one standard quad communications outlet (two voice and two data) co-located with associated power on the opposite wall.

To provide universal access to power and data connections, wall-mounted receptacles and outlets can be installed no less than 15" above the finished floor for forward reach access and no less than 9" above the finished floor for side reach access, with a minimum of 30" wide x 48" deep clear floor space. If no alternatives are provided to receptacles mounted at 6" above the work surface, the depth of the work surface cannot exceed 24" for a side reach or 25" for a forward reach at accessible locations.

#### Security

Staff office which requires a mechanical lock and key, electronic keypad, or magnetic card reader to control access.

#### Signage

Required signage includes a permanent room identification sign ("Circulation Office") wall-mounted on the latch side of the door at 60" above the finished floor with characters that must be 1/32" raised uppercase sans serif type accompanied by Grade II Braille. This room identification sign may include a sign carrier for posting schedules. Additional signage requirement includes room identification number as assigned by facilities staff.

#### Furniture & Equipment and Shelving Units

	UNIT QTY	UNIT Sq. Ft.	UNIT EXTENDED Sq. Ft.
<b>Description of Furniture &amp; Equipment Units</b>			
Chair, Department Head's	1	0	0
Chair, Visitor's	1	15	15
Computer, Staff Desktop	1	0	0
Desk, Department Head's	1	65	65
File Cabinet, Lateral (Five Drawer)	1	20	20
Printer, Ink-Jet (Color)	1	0	0
Shelving, SF 84"h Steel W/ 6 Shelves	2	12	24
Telephone Handset	1	0	0



**Functional Activity**

The Circulation Workroom provides space for all kinds of "behind the scenes" activities. The library staff will check-in library materials that have been returned and then will sort them on shelving before returning them to the stacks. Circulation overdues, bills, and reserve notices will be processed here.

**Occupancy**

STAFF WORKROOM WORKSTATIONS: 2

**Relationships**

The Circulation Office, and Circulation Desk should all be immediately adjacent to the Circulation Workroom. Staff will move frequently between these spaces, and particularly between the Desk and the Workroom. There must be easy access between the spaces and sight lines between the Workroom and the Circulation Desk so that staff can fill-in if a line starts to form at the Desk.

**ADJACENT:**

Book Return Room  
Circulation Office  
Circulation Desk

**CLOSE:**

Staff Entrance & Lobby

**PROXIMITY:**

Custodial Workroom

**Flexibility**

Since staff work areas are frequently remodeled and expanded, the workstations should be modular and flexible. Sufficient flexibility should be provided to allow for remodeling or expansion if it becomes necessary in the future. This would include, for example, laying carpet or whatever floor covering is being used, under any service desk, built-in cabinetry or casework.

**Fenestration**

Interior windows which allow supervision of the Circulation Desk are required. Interior windows require shades, etched glass, or roller blinds so the public cannot see into this room. Natural light is desirable as long as it does not create glare on computer screens. Exterior windows in staff areas should be provided with roller shades or other light control devices if needed. Staff areas may have operable windows.

**Finishes**

The floor finishes must be stain repellant, dirt resistant, easy to clean and low maintenance. The finishes in the workroom should be comfortable and durable since this area will get heavy use.

**CEILING:**

Acoustical tile

**WALLS:**

Glass window; Paint (Latex semi-gloss recommended); Vinyl wall covering; Corner guards; White boards; Tackable surfaces

**FLOOR:**

Anti-static carpet tile or heavy weight commercial carpet with enhanced backing (No carpet pad permitted); Vinyl tile at sink and work counter; Vinyl or carpet cove base

**Access**

The Circulation Workroom must be accessible by means of a 36" minimum aisle. The accessible aisle requirement is increased in increments of 1 1/2" per 5' in distance to the



nearest exit, cross aisle, or foyer. If an accessible aisle is less than 60" wide, then turning and passing spaces of 60" by 60" must be located at any obstruction and at reasonable intervals not exceeding 200'. Corridors which serve an occupancy load of 10 or more must be a minimum of 44" wide.

A 36" wide door with a minimum clearance of 32" is required. Interior doors can require no more than 5 pounds of pressure to operate with hardware mounted no higher than 48" above the finished floor. Thresholds cannot exceed 1/2" in height.

If a sink is provided, the sink faucets must be the lever type, electronically activated, or approved self closing valves with a minimum 10 second flow. Faucets must be operable with a single hand and not require any twisting of the wrist, pinching, or tight grasping. A maximum of 5 pounds of force can be required to operate the faucets.

If the use of a sink is essential to an employee's job, then an accessible space under the sink must be provided including a minimum of 30" x 48" of clear space in front of the sink that allows forward approach. The counter next to the sink can be no higher than 34" high and the sink area can be no higher than 34" above the finished floor with a clear 19" depth for knee clearance. There can be no obstructions, cabinets, or sharp objects under the sink; and the hot water pipes and drains must be properly insulated. If fixed storage cabinets, drawers, or lockers are provided, at least one of each type must comply.

Signage will meet requirements as outlined in the Signage Space Detail.

#### **Acoustics**

The sound generated in this space (primarily staff conversations and the sound of books being put on book trucks, etc.) needs to be absorbed and kept from filtering out to the Circulation Desk and the rest of the library. Ceiling tile must have a high sound isolation rating, and other sources of sound penetration, including recessed electrical boxes, doors, window mullions and thickness of glass, wall thickness and air space, and ceiling system must be addressed.

#### **HVAC**

Separate temperature control is required. Comfort level to be set at 68° to 72° during heating and 72° to 78° during cooling for energy savings. Relative humidity at 30 to 60% and ventilation at 10 to 12 cubic feet per minute per person with 3 to 10 air exchanges per hour. HVAC vents should be located to avoid drafts on occupants.

#### **Illumination**

Minimum 30 to 40 foot candles of ambient light supplemented by task lighting providing at least 50 foot candles at the workstations. Standard non-glare office lighting, such as deep-cell parabolic fluorescent fixtures with semi-specular aluminum louvers, is acceptable. Lighting should be zoned so that a portion of the fixtures can be turned off for energy savings when natural lighting is available or when lower levels of lighting are desirable.

#### **Telecommunications**

Provide one standard quad communications outlet (two voice and two data) co-located with associated power at each workstation position. The outlets should be mounted at 15" above the finished floor for desks that are adjacent to a wall. If modular furniture is used, the communications cabling can be distributed via conduit and J-boxes with the communications outlets integrated into the furniture.

Provide one standard duplex communications outlet (one voice and one data) with associated power at each printer and fax location.

To provide universal access to power and data connections, wall-mounted receptacles and outlets can be installed no less than 15" above the finished floor for forward reach access and no less than 9" above the finished floor for side reach access, with a minimum of 30" wide x 48" deep clear floor space. If no alternatives are provided to receptacles mounted at 6" above the work surface, the depth of the work surface cannot exceed 24" for a side reach or 25" for a forward reach at accessible locations.



## Security

This is a staff workroom which requires a mechanical lock and key, electronic keypad, or magnetic card reader to control access. If the Circulation Workroom does not have a door, patrons should be discouraged from entering by the use of gates and/or signage. Staff in this area should be able to see the Circulation Desk so they can get to it quickly if needed. Sight lines to other areas of the library from the workroom are desirable.

## Signage

Required signage includes a permanent room identification sign ("Circulation Workroom" or "Staff Only") wall-mounted on the latch side of the door at 60" above the finished floor, with 1/32" raised uppercase sans serif type accompanied by Grade II Braille. Additional signage requirement includes room identification number as assigned by facilities staff.

## Furniture & Equipment and Shelving Units

	UNIT QTY	UNIT Sq. Ft.	EXTENDED Sq. Ft.
<u>Description of Furniture &amp; Equipment Units</u>			
Book Bin, Depressible	1	20	20
Book Truck	15	10	150
Bulletin Board	1	0	0
Cabinet, AV Equipment	1	15	15
Cabinets, Above Counter	12	0	0
Cabinets, Below Counter	12	0	0
Chair, Task	3	0	0
Clock	1	0	0
Computer, Staff Desktop	2	0	0
First Aid Kit	1	0	0
Key Cabinet	1	0	0
Paper Cutter	1	0	0
Printer, Ink-Jet (Color)	1	0	0
Recycling Bin	1	15	15
Safe, Floor	1	0	0
Security System Book Desensitizer	4	0	0
Security System Book Resensitizer	1	0	0
Security System Desensitizer/Resensitizer	1	0	0
Security System Media Resensitizer	1	0	0
Shelving, DF 90"h Steel W/14 Shelves	10	18	180
Shelving, SF 90"h Steel W/ 7 Shelves	6	12	72
Sink	1	18	18
Telephone Handset	1	0	0
Video Cassette Rewind Unit, Multiple	1	0	0
Video Tape Cleaner & Rewind Unit	1	0	0
Workstation, Clerical Office System	2	40	80





**Functional Activity**

The Copy Center will provide a separate room or area where library patrons can copy library materials or materials of their own. Some sound attenuation will be required, particularly if this is an open area and not an enclosed room. This room may require display and storage space for tax forms if they are provided in paper format. The room should provide a work counter for sorting and collating, pasting and laying out projects, and organizing large jobs. The layout of the room must allow access to the sides or rear of the machines for servicing the equipment, refilling paper and toner, and removing paper jams. Space must be provided in the room for recycling bins, change machines, card vending machines, and other equipment as necessary. There must be a logical way for patrons to queue either inside or just outside the room during busy periods.

**Relationships**

The Circulation Copy Center should be visible from the Public Entrance and Lobby and the Circulation Desk, and just off of the main traffic path. Staff at the Circulation Desk should have sight lines into the Copy Center since they will provide supervision and assistance.

**CLOSE:**

Circulation Desk  
Public Entrance & Lobby

**Flexibility**

Sufficient flexibility should exist (prefer no load-bearing walls, HVAC independent of room walls) to allow the Circulation Desk to expand into this space if required in the future.

**Fenestration**

Windows which allow the staff to supervise this room are essential.

**Finishes**

The public will utilize this area quite literally hundreds of times each day. The floor finishes must be stain repellant, dirt resistant, easy to clean and low maintenance. It will be the primary destination for many patrons, and requires careful attention to layout, clean appearance, and extremely durable materials.

**CEILING:**

Acoustical tile

**WALLS:**

1/2 Glass wall; Paint (Latex semi-gloss recommended); Vinyl, Sisal or  
Fabric wall covering with acoustical panels for sound absorption;  
Tackable surfaces

**FLOOR:**

Vinyl Tile; Anti-static carpet tile or heavy weight commercial  
anti-static carpet w/ enhanced backing (No carpet pad permitted)

**Access**

The Copy Center will be accessible by means of a 36" minimum aisle and a 36" wide door with a minimum clearance of 32". Interior doors can require no more than 5 pounds of pressure to operate with hardware mounted no higher than 48" above the finished floor. Thresholds cannot exceed 1/2" in height.

Signage will meet requirements as outlined in the Signage Space Detail.

**Acoustics**

This is a very noisy space because of the high use, the copy machines, and conversations between patrons and staff. Adequate sound isolation must be provided through the use of acoustic ceilings, floors and wall treatment. In addition to acoustical treatment of floors and ceilings, acoustical panels in the walls to help absorb noise should be considered.

**HVAC**



Separate temperature control is required. Temperature to be controlled at 68° and 72° when heating and 72° to 78° when cooling for energy savings. Ventilation must provide rapid dispersal of any heat produced by equipment or high number of occupants. Enclosed room requires individual thermostat with lockable cover.

#### **Illumination**

Standard non-glare lighting at 30 to 40 foot candles. Consider occupancy sensors or motion detectors for energy savings.

#### **Telecommunications**

Provide one standard duplex communications outlet (one voice and one data) co-located with associated power at each copy machine, printer, scanner and FAX location; and one standard quad communications outlet (two voice and two data) co-located with associated power at any workstation positions mounted at 15" above the finished floor.

#### **Security**

This area will be supervised by staff at the Circulation Desk. Sight lines from the Circulation Desk to this area, which should be glass-enclosed, must be unobstructed.

#### **Signage**

Required signage includes a permanent room identification sign ("Copy Center") wall-mounted on the latch side of the door at 60" above the finished floor with 1/32" raised uppercase sans serif characters accompanied by Grade II Braille. Additional signage requirement includes room identification number as assigned by facilities staff.

Additional requirement includes area identification flags with universal symbol wall-mounted (perpendicular) in the major traffic paths.

### **Furniture & Equipment and Shelving Units**

	UNIT QTY	UNIT Sq. Ft.	UNIT EXTENDED Sq. Ft.
<b>Description of Furniture &amp; Equipment Units</b>			
Bulletin Board	1	0	0
Cabinets, Below Counter (Lockable)	10	0	0
Change Machine (Bill & Coin)	1	15	15
Copier, B&W Freestanding	1	50	50
Copier, Color Freestanding	1	50	50
FAX Machine, Desktop Coin-Operated	1	0	0
Preparation Counter	1	70	70
Rack, Literature Display Handout	1	0	0
Recycling Bin	1	15	15



**FUNCTIONAL ACTIVITY**

The Library's very successful Community Computer Center serves over 50,000 patrons a year. The new library will enable the services to be provided from a much improved physical space, ensuring that the community can continue to have access to and training for electronic information. This division houses the major portions of the Library's computer functions. The public service areas provide access to electronic resources, training classes and distance learning opportunities. The staff areas house the Technician's office, the repair and storage areas and the main computer/telecommunications hub.

**SPATIAL RELATIONSHIPS**

The Computer Division should have a public service visibility, with the staff areas secured and in the "back of the house." If housed on a secondary floor, there needs to be an elevator connection to facilitate moving equipment. As the main computer hub is housed here, there needs to be the ability to communicate with all library areas, even if not physically close.

Proximity: Technical Service  
Circulation Services  
Reference Services

<b>DIVISION SPACE SUMMARY</b>	<b>Sq. Ft.</b>
Community Distance Learning Room	405
Computer Center Desk	196
Computer Center Waiting Area	230
Computer Lab A	1,500
Computer Lab B	940
Computer Repair & Storage	491
Computer Room	224
Computer Systems Office	112
<b>TOTAL:</b>	<b>4,098</b>



**Functional Activity**

This area will provide space for video conferencing, training, and other meetings.

**Occupancy**

CONFERENCE TABLE: 1

CHAIRS: 24

VIDEO CONFERENCING SYSTEM: 1

**Relationships**

This area must be close to the Computer Systems Office.

**CLOSE:**

Literacy Office  
Computer Systems Office  
Public Rest Rooms

**PROXIMITY:**

Computer Maintenance and Repair

**Flexibility**

Sufficient flexibility should exist to allow the rearrangement and remodeling of this space. It is not expected that this area would need to be expanded.

**Fenestration**

Any natural light in this area must be controlled to avoid glare on the projection screen or interference with multimedia presentations. Interior windows will require roller shades or other room darkening devices in order to ensure high quality presentations.

**Finishes**

The walls and carpet will not have the heavy use of public areas, but still must maintain a quality appearance after many years of normal use. The floor finishes must be stain resistant, dirt repellant, durable, attractive and as maintenance free as possible since they will get very heavy traffic. Wall finishes should be mark resistant, attractive, durable and easy to clean.

**CEILING:**

Acoustical tile

**WALLS:**

Paint (Latex semi-gloss recommended; Sisal, Vinyl, or  
Fabric wall covering; Corner guards for columns and walls; Hanging track;  
Vinyl or carpet cove base

**FLOOR:**

Anti-static carpet tile or heavy weight commercial anti-static carpet  
with enhanced backing (No carpet pad permitted); Vinyl or tile floor  
around any water fountains

**Access**

The Distance Learning Room will be accessible by means of a 36" minimum aisle. The accessible aisle requirement is increased in increments of 1½" per 5' in distance to the nearest exit, cross aisle, or foyer. If an accessible aisle is less than 60" wide, then turning and passing spaces of 60" by 60" must be located at any obstruction and at reasonable intervals not exceeding 200'.

A 36" wide door with a minimum clearance of 32" is required. Interior door can require no more than 5 pounds of pressure to operate with hardware mounted no higher than 48" above finished floor. Thresholds cannot exceed ½" in height.

**Acoustics**

This room will generate a fair amount of noise because of the exchange between the



students and the instructor, amplified sound and voice, and noise generated from the equipment. Surfaces should be absorptive and include carpet, acoustical wall treatment and acoustical ceiling tiles. The primary strategy for noise control will be to locate this space away from offices, collections and reader seat areas, and other areas requiring quiet.

#### **HVAC**

Separate temperature control is required. Comfort level to be set at 68° to 72° and 72° to 78° during cooling for energy savings. Relative humidity at 30 to 60% and ventilation at 5 to 12 cubic feet per minute per person with 3 to 10 air exchanges per hour. HVAC vents should be located to avoid drafts on the occupants.

#### **Illumination**

Light levels of 50 foot candles at table top are preferred, but at least 30 to 40 foot candles must be maintained. Lighting must be dimmable for high quality multimedia presentation as well as potential energy savings. Light controls should be located at the entrance.

#### **Telecommunications**

Two ISDN lines need to be provided, with the planned capacity for expansion. Conference table needs to have voice/data/power pedestal installed under the table. Provide one standard quad communications outlet (two voice and two data) co-located with associated power every 2 feet of wall. The outlets should be mounted at 15" above finished floor for desks that are adjacent to a wall.

To provide universal access to power and data connections, wall-mounted receptacles and outlets can be installed no less than 15" above the finished floor for forward reach access and no less than 9" above the finished floor for side reach access, with a minimum of 30" wide x 48" deep clear floor space. If no alternatives are provided to receptacles mounted at 6" above the work surface, the depth of the work surface cannot exceed 24" for a side reach or 25" for a forward reach at accessible locations.

#### **Security**

This space is supervised by the Literacy Office. This space must be able to be locked when not in use.

#### **Signage**

A sign on the door that leads to this space that says: "Distance Learning".

#### **Furniture & Equipment and Shelving Units**

	UNIT QTY	UNIT Sq. Ft.	EXTENDED Sq. Ft.
<b>Description of Furniture &amp; Equipment Units</b>			
Chair, Conference Room	14	0	0
Chair, Conference Room	10	12	120
Projection Screen, Wall Mounted	1	0	0
Table, Conference	1	260	260
Telephone Headset	1	0	0
Video Conferencing System	1	25	25
White Board	1	0	0



**Functional Activity**

The Computer Center Desk is where patrons check in to use the Computer Center. If on a secondary floor, this space should be visible when arriving on the second floor. The staff will have access to the on-line catalog, CD-ROM resources, and the Internet from their workstations at the desk. While there will be seats available for the computer assistants, they will not spend much time sitting here, but instead will be walking between the desk and the computers to assist patrons.

**Occupancy**

COMPUTER CENTER DESK WORKSTATIONS: 2

**Relationships**

The Computer Center Desk must be prominently located so that it is visible upon entering the Library.

**ADJACENT:**

Computer Center Waiting Area  
Computer Center Lab A & B

**CLOSE:**

Distance Learning Room

**PROXIMITY:**

Literacy Office

**Flexibility**

Sufficient flexibility should exist to allow the rearrangement and remodeling of this space. It is not expected that this area would need to be expanded.

**Fenestration**

Although natural light is desirable in this space, east and west facing windows are to be avoided. Exterior windows may require roller shades or other light control devices. Any operable windows in public areas will require lockable screens. Computer screens and workstations should be placed at right angles to any windows that may cause glare.

**Finishes**

The floor finishes must be stain resistant, dirt repellent, durable, attractive and as maintenance free as possible since they will get very heavy traffic. Wall finishes should be mark resistant, attractive, durable and easy to clean.

**CEILING:**

Acoustical tile

**WALLS:**

Paint (Latex semi-gloss recommended; Sisal, Vinyl, or  
Fabric wall covering; Corner guards for columns and walls; Hanging track;  
Vinyl or carpet cove base

**FLOOR:**

Anti-static carpet tile or heavy weight commercial anti-static carpet  
with enhanced backing (No carpet pad permitted); Vinyl or tile floor  
around any water fountains

**Access**

The Computer Center Desk must be accessible by means of a 36" minimum aisle. The accessible aisle requirement is increased in increments of 1 ½" per 5' in distance to the nearest exit, cross aisle, or foyer. If an accessible aisle is less than 60" wide, then turning and passing spaces of 60" by 60" must be located at any obstruction and at reasonable intervals not exceeding 200'.



A minimum of 5%, but no less than one, of tables, counters or carrels will meet accessibility requirements. A minimum of 30" wide x 48" deep clear floor space will be provided with at least one unobstructed side of the floor space adjoining either an accessible route or another clear floor space. The knee space must be at least 27" high, 30" wide, and 19" deep. The top of the table, carrel, or counter shall be from 28" to 34" above the finished floor.

If network access is available to the public for portable computers or other electronic equipment, then access to data jacks and power receptacles must meet the criteria outlined in the Telecommunications Space Detail.

Audible and visual emergency warning alarms are required. No location in the room can be more than 50' from a visual signal unless there are no obstructions higher than 6' above the finished floor, in which case, devices may be placed around the perimeter spaced to a maximum of 100'.

Signage will meet requirements as outlined in the Signage Space Detail.

#### **Acoustics**

This area will generate some noise because of the exchange between patrons and staff. Surfaces should be absorptive and include carpet, acoustical wall treatment, and acoustical ceiling tiles.

#### **HVAC**

Comfort level to be set at 68° to 72° and 72° to 78° during cooling for energy savings. Relative humidity at 30 to 60% and ventilation at 5 to 12 cubic feet per minute per person with 3 to 10 air exchanges per hour. HVAC vents should be located to avoid drafts on the occupants.

#### **Illumination**

Standard non-glare office lighting averaging 30 to 40 foot candles with 50 foot candles on the desk top. The Computer Center Desk should be highlighted to draw patrons to it automatically. A table lamp in the seating area will help to provide a comfortable atmosphere.

#### **Telecommunications**

Provide one standard quad communications outlet (two voice and two data) co-located with associated power for every two feet of wall or modular furniture. The outlets should be mounted at 15" above finished floor for desks that are adjacent to a wall. If modular furniture is used, the communications cabling can be distributed via conduit and J-boxes with the communications outlets integrated into the furniture; and one standard duplex communications outlet (one voice and one data) with associated power at each printer and fax location.

To provide universal access to power and data connections, wall-mounted receptacles and outlets can be installed no less than 15" above the finished floor for forward reach access and no less than 9" above the finished floor for side reach access, with a minimum of 30" wide x 48" deep clear floor space. If no alternatives are provided to receptacles mounted at 6" above the work surface, the depth of the work surface cannot exceed 24" for a side reach or 25" for a forward reach at accessible locations.

#### **Security**

This desk is the central surveillance point for the entire Computer Center. As much of the lab as possible should be visible to staff standing at this location.

#### **Signage**

A sign on the door that leads to this area that says: "Computer Center". Required signage includes a permanent room identification sign ("Computer Center" or "Staff Only") wall-mounted on the latch side of the door at 60" above the finished floor with 1/32" raised uppercase sans serif characters accompanied by Grade II Braille. Additional signage requirement includes room identification number as assigned by facilities staff.



## Furniture & Equipment and Shelving Units

	UNIT QTY	UNIT Sq. Ft.	EXTENDED Sq. Ft.
<u>Description of Furniture &amp; Equipment Units</u>			
Cabinets, Below Counter	6	0	0
Camera, Digital	2	0	0
Cash Register	1	0	0
Chair, Task	2	0	0
Computer, Staff Desktop	2	0	0
Copier, B&W Countertop	1	0	0
Printer, Ink-Jet (Color)	1	0	0
Printer, Laser (B&W)	1	0	0
Printer, Laser (Color)	1	0	0
Queuing Space (Per Person)	6	6	36
Scanner, Flat	1	0	0
Telephone, Portable/Wireless Headset	2	0	0
Workstation, Computer Center Desk	2	80	160





**Functional Activity**

The Computer Center Waiting Area is where patrons sit while waiting to use the Computer Center. This space should be visible from the Computer Center Desk.

**Occupancy**

READER SEATS: 5

SOFA: 1

**Relationships**

This area must be adjacent to the Computer Center Desk, Computer Center Lab A & B and the Community Distance Learning Room.

**ADJACENT:**

Computer Center Lab A & B

**Flexibility**

Sufficient flexibility should exist to allow the rearrangement and remodeling of this space. It is not expected that this area would need to be expanded.

**Fenestration**

Although natural light is highly desirable in this space, east and west facing windows are to be avoided. Exterior windows may require roller shades or other light control devices. Any operable windows in public areas will require lockable screens.

**Finishes**

The floor finishes must be stain resistant, dirt repellant, durable, attractive and as maintenance free as possible since they will get very heavy traffic. Wall finishes should be mark resistant, attractive, durable and easy to clean.

**CEILING:**

Acoustical tile

**WALLS:**

Paint (Latex semi-gloss recommended; Sisal, Vinyl, or Fabric wall covering; Corner guards for columns and walls; Hanging track; Vinyl or carpet cove base

**FLOOR:**

Anti-static carpet tile or heavy weight commercial anti-static carpet with enhanced backing (No carpet pad permitted); Vinyl or tile floor around any water fountains

**Access**

The Computer Center Waiting Area will be accessible by means of a 36" minimum aisle. The accessible aisle requirement is increased in increments of 1½" per 5' in distance to the nearest exit, cross aisle, or foyer. If an accessible aisle is less than 60" wide, then turning and passing spaces of 60" by 60" must be located at any obstruction and at reasonable intervals not exceeding 200'.

A minimum of 5%, but no less than one, of tables, counters or carrels will meet accessibility requirements. A minimum of 30" wide x 48" deep clear floor space will be provided with at least one unobstructed side of the floor space adjoining either an accessible route or another clear floor space. The knee space must be at least 27" high, 30" wide, and 19" deep. The top of the table, carrel, or counter shall be from 28" to 34" above the finished floor.

If network access is available to the public for portable computers or other electronic equipment, then access to data jacks and power receptacles must meet the criteria outlined in the Telecommunications Space Detail.



Audible and visual emergency warning alarms are required. No location in the room can be more than 50' from a visual signal unless there are no obstructions higher than 6' above the finished floor, in which case, devices may be placed around the perimeter spaced to a maximum of 100'.

Signage will meet requirements as outlined in the Signage Space Detail.

#### Acoustics

This area will generate some noise because of the exchange between patrons and staff. Surfaces should be absorptive and include carpet, acoustical wall treatment, and acoustical ceiling tiles.

#### HVAC

Comfort level to be set at 68o to 72 o and 72o to 78 o during cooling for energy savings. Relative humidity at 30 to 60% and ventilation at 5 to 12 cubic feet per minute per person with 3 to 10 air exchanges per hour. HVAC vents should be located to avoid drafts on the occupants.

#### Illumination

Standard non-glare office lighting averaging 30 to 40 foot candles with 50 foot candles on the desk top. The Computer Center Desk should be highlighted to draw patrons to it automatically. A table lamp in the seating area will help to provide a comfortable atmosphere.

#### Telecommunications

Provide one standard quad communications outlet (two voice and two data) co-located with associated power near the sofa and chairs to accommodate future technology needs, esp. kiosk type applications. The outlets should be mounted at 15" above the finished floor for desks that are adjacent to a wall. If modular furniture is used, the communications cabling can be distributed via conduit and J-boxes with the communications outlets integrated into the furniture.

Provide one standard duplex communications outlet (one voice and one data) with associated power at each printer and fax location.

To provide universal access to power and data connections, wall-mounted receptacles and outlets can be installed no less than 15" above the finished floor for forward reach access and no less than 9" above the finished floor for side reach access, with a minimum of 30" wide x 48" deep clear floor space. If no alternatives are provided to receptacles mounted at 6" above the work surface, the depth of the work surface cannot exceed 24" for a side reach or 25" for a forward reach at accessible locations.

#### Security

This space is supervised from the Computer Center Desk.

#### Signage

A sign on the door that leads to this area that says: "Computer Center". Required signage includes a permanent room identification sign ("Computer Center" or "Staff Only") wall-mounted on the latch side of the door at 60" above the finished floor with 1/32" raised uppercase sans serif characters accompanied by Grade II Braille. Additional signage requirement includes room identification number as assigned by facilities staff.

#### Furniture & Equipment and Shelving Units

	UNIT QTY	UNIT Sq. Ft.	UNIT EXTENDED Sq. Ft.
<b>Description of Furniture &amp; Equipment Units</b>			
Chair, Lounge	5	35	175
Sofa (2 Seat)	1	55	55



**Functional Activity**

The Computer Center will provide a space that will be set up permanently for computer use and training to teach the use of the library's online catalog, databases, Internet searching and various software applications. This room will be available for staff training and library programming and for community groups. The room will have training tables and multimedia computers.

**Occupancy**

Technology Workstations: 30

**Relationships**

This room should be adjacent to and visible from the Computer Center Desk since the Computer Center staff will be primarily responsible for its supervision. Enough room must be provided to accommodate large groups entering and leaving the space. The Computer Center should be easily accessible from the Computer Center Desk and Waiting Area and to the Public Rest Rooms.

It is important for Lab A and Lab B to be directly adjacent, with a moveable/sliding wall between. This will allow the entire space to be opened, utilized and supervised as one space, while allowing the spaces to be partitioned into two separate training labs as needed.

**ADJACENT:**

Computer Center/Training Lab (Labs A & B need to be separated by a  
moveable/sliding wall)

Computer Center Desk

Computer Center Waiting Area

**PROXIMITY:**

Public Rest Rooms

**Flexibility**

It is not anticipated that this area would expand or change purpose, but technology capability must be flexible.

**Fenestration**

Natural light is not desirable due to potential glare. Computer screens and workstations should be placed at right angles to any windows, and roller shades or other light control devices may be required.

**Finishes**

The floor finishes must be stain resistant, dirt repellant, durable, attractive and as maintenance free as possible since they will get very heavy traffic. Wall finishes should be mark resistant, attractive, durable and easy to clean.

**CEILING:**

Acoustical tile

**WALLS:** Moveable/Sliding wall to create 2 separate rooms.

Moveable/Sliding wall to open into Training Room B

Paint (Latex semi-gloss recommended; Sisal, Vinyl, or

Fabric wall covering; Corner guards for columns and walls; Hanging track;

Vinyl or carpet cove base

**FLOOR:**

Anti-static carpet tile or heavy weight commercial anti-static carpet with enhanced backing (No carpet pad permitted); Vinyl or tile floor around any water fountains

**Access**

The Computer Lab/Training Room must be accessible by means of a 36" minimum aisle. The accessible aisle requirement is increased in increments of 1 ½" per 5' in distance to the nearest exit, cross aisle, or foyer. If an accessible aisle is less than 60" wide, then turning and passing spaces of 60" by 60" must be located at any obstruction and at reasonable intervals not exceeding 200'.

A minimum of 5%, but no less than one, of tables, counters or carrels will meet accessibility requirements. A minimum of 30" wide x 48" deep clear floor space will be provided with at least one unobstructed side of the floor space adjoining either an accessible route or another clear floor space. The knee space must be at least 27" high, 30" wide, and 19" deep. The top of the table, carrel, or counter shall be from 28" to 34" above the finished floor.

If network access is available to the public for portable computers or other electronic equipment, then access to data jacks and power receptacles must meet the criteria outlined in the Telecommunications Space Detail.

Audible and visual emergency warning alarms are required. No location in the room can be more than 50' from a visual signal unless there are no obstructions higher than 6' above the finished floor, in which case, devices may be placed around the perimeter spaced to a maximum of 100'.

Signage will meet requirements as outlined in the Signage Space Detail.

#### **Acoustics**

This room will generate a fair amount of noise because of the exchange between students and the instructor, amplified sound and voice, and noise generated from the equipment. Moderate to high acoustical isolation is required in this room. The room's surfaces should be absorptive and include carpet, acoustical wall panels, and acoustical ceiling tiles. Ceiling tile must have a high sound isolation rating, and other sources of sound penetration, including recessed electrical boxes, doors, window mullions and thickness of glass, and ceiling system must be addressed. A white noise or sound masking system may be required to provide an appropriate environment for performances or presentations.

#### **HVAC**

Temperature to be controlled at 68° and 72° when heating and 72° to 78° when cooling for energy savings. Relative humidity at 30 to 60% and ventilation at 5 to 12 cubic feet per minute per person with 3 to 10 air exchanges per hour. Ventilation must provide rapid dispersal of any heat produced by equipment or high number of occupants. Area requires individual thermostat with lockable cover. Ductwork should be baffled to prevent unacceptable noise levels.

#### **Illumination**

Provide a minimum of 30 to 40 foot candles of light (with 50 foot candles preferred) at table top level in the seating areas. Provide high quality, non-glare light in the seating areas for reading and viewing computer screens. Lighting should be zoned so that a portion of the fixtures can be turned off for energy savings when natural lighting is available or when lower levels of lighting are desirable.

#### **Telecommunications**

Provide one standard quad communications outlet (two voice and two data) co-located with associated power located every 2 feet on the walls. The outlets should be mounted at 15" above the finished floor for desks that are adjacent to a wall. If modular furniture is used, the communications cabling can be distributed via conduit and J-boxes with the communications outlets integrated into the furniture. There should be a ladder rack and/or conduit horizontal path to the Computer Room.

Provide one standard duplex communications outlet (one voice and one data) with associated power at each printer and fax location.

To provide universal access to power and data connections, wall-mounted receptacles and



outlets can be installed no less than 15" above the finished floor for forward reach access and no less than 9" above the finished floor for side reach access, with a minimum of 30" wide x 48" deep clear floor space. If no alternatives are provided to receptacles mounted at 6" above the work surface, the depth of the work surface cannot exceed 24" for a side reach or 25" for a forward reach at accessible locations.

#### **Audio - Visual**

The computer training will be greatly enhanced by providing the ability for students to view a large screen projected image of the instructor's computer screen. This may be accomplished through the use of portable or installed equipment. Use of video monitors is not advised. Large plasma screens (50" or larger) may be used in smaller rooms. A portable projector may be positioned on a mobile cart at the front of the room. An installed projector may be mounted at the ceiling or mounted at a shelf or cabinet at the back of the room. Caution should be exercised in placing projectors at the rear of the room to ensure that light fixtures, people, furniture or other objects in the path of the projected light, do not obstruct images. Images may be displayed onto a projection screen at the front of the training room. The top of the screen should be located at least 6 inches from the top of the wall to minimize reflections off the ceiling. The bottom edge of the screen should not be lower than 4 feet from the floor to provide clear sight line to the entire screen from any seat in the room.

Use of installed projection equipment may require conduit installation for routing of cabling between the projector and the instructor's workstation. It may also be desirable to the ability to display videotape or other pre-recorded video media. Depending on the nature of the computer application being used, it may or may not be necessary to provide speakers for sound reproduction. If videotape playback capability is provided, loudspeakers and sound amplification will be required. Connections to television distribution feeds may also be appropriate.

#### **Security**

This area will be monitored by Computer Center Desk staff who are charged with its supervision. The room requires a mechanical lock and key, electronic keypad, or magnetic card reader to control access.

#### **Signage**

Required signage includes a major area directional and identification sign which can be seen from the public entrance or lobby. This directional sign ("Computer Center") must be wall-mounted or ceiling hung at least 80" high when suspended overhead on a path of travel and must have characters and numbers that are appropriately sized according to the viewing distance, but no less than 3" in height. Characters must have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10; must contrast with their background; and must be in a matte, eggshell, or other non-glare finish.

A Permanent room identification sign ("Computer Center") wall-mounted on the latch side of the doors at 60" above the finished floor with 1/32" raised uppercase sans serif characters accompanied by Grade II Braille. This room identification sign may include an "In-Use" slider panel or a sign carrier for posting schedules. Additional signage requirement includes room identification number as assigned by facilities staff.

Additional requirements include fire and life safety lighted exit signs, and may include a building floor directory or stack location map, pictogram flag signs in traffic paths for elevators or rest rooms, restriction signs (e.g., "No Food or Drink"), changeable and permanent information signs (e.g., "Internet Classes"), and donor recognition plaques.



## Furniture & Equipment and Shelving Units

	UNIT QTY	UNIT Sq. Ft.	EXTENDED Sq. Ft.
<u>Description of Furniture &amp; Equipment Units</u>			
Chair, Task	45	0	0
Computer, Public Desktop	30	0	0
Headphone, AV	30	0	0
Scanner, Flat	3	0	0
Technology Carrel	15	40	600
Technology Carrel	15	60	900



**Functional Activity**

The Computer Center will provide a space that will be set up permanently for computer use and training to teach the use of the library's online catalog, databases, Internet searching and various software applications. This room will be available for staff training and library programming and for community groups. The room will have training tables and multimedia computers.

**Occupancy**

Technology Workstations: 30

Staff Workstations: 1

**Relationships**

This room should be close to and visible from the Computer Center Desk since the Computer Center staff will be primarily responsible for its supervision. Enough room must be provided to accommodate large groups entering and leaving the space. The Computer Center/Training Room B should be easily accessible from the Computer Center Desk and Waiting Area and to the Public Rest Rooms.

It is important for Lab A and Lab B to be directly adjacent, with a moveable/sliding wall between. This will allow the entire space to be opened, utilized and supervised as one space, while allowing the spaces to be partitioned into two separate training labs as needed.

**ADJACENT:**

Computer Center/Training Lab (Lab A & B need to be separated  
by a moveable/sliding wall)

Computer Center Desk  
Computer Center Waiting Area

**PROXIMITY:**

Public Rest Rooms

**Flexibility**

It is not anticipated that this area would expand or change purpose, but technology capability must be flexible.

**Fenestration**

Although natural light is desirable in this space, east and west facing windows are to be avoided. Exterior windows may require roller shades or other light control devices. Any operable windows in public areas will require lockable screens. Computer screens and workstations should be placed at right angles to any windows that may cause glare.

**Finishes**

The floor finishes must be stain resistant, dirt repellant, durable, attractive and as maintenance free as possible since they will get very heavy traffic. Wall finishes should be mark resistant, attractive, durable and easy to clean.

**CEILING:**

Acoustical tile

**WALLS:** Moveable/sliding wall to open into Computer Center

Paint (Latex semi-gloss recommended; Sisal, Vinyl, or  
Fabric wall covering; Corner guards for columns and walls; Hanging track;  
Vinyl or carpet cove base

**FLOOR:**

Anti-static carpet tile or heavy weight commercial anti-static carpet  
with enhanced backing (No carpet pad permitted); Vinyl or tile floor  
around any water fountains





## **Access**

The Computer Lab/Training Room B must be accessible by means of a 36" minimum aisle. The accessible aisle requirement is increased in increments of 1 ½" per 5' in distance to the nearest exit, cross aisle, or foyer. If an accessible aisle is less than 60" wide, then turning and passing spaces of 60" by 60" must be located at any obstruction and at reasonable intervals not exceeding 200'.

A minimum of 5%, but no less than one, of tables, counters or carrels will meet accessibility requirements. A minimum of 30" wide x 48" deep clear floor space will be provided with at least one unobstructed side of the floor space adjoining either an accessible route or another clear floor space. The knee space must be at least 27" high, 30" wide, and 19" deep. The top of the table, carrel, or counter shall be from 28" to 34" above the finished floor.

If network access is available to the public for portable computers or other electronic equipment, then access to data jacks and power receptacles must meet the criteria outlined in the Telecommunications Space Detail.

Audible and visual emergency warning alarms are required. No location in the room can be more than 50' from a visual signal unless there are no obstructions higher than 6' above the finished floor, in which case, devices may be placed around the perimeter spaced to a maximum of 100'.

Signage will meet requirements as outlined in the Signage Space Detail.

## **Acoustics**

This room will generate a fair amount of noise because of the exchange between students and the instructor, amplified sound and voice, and noise generated from the equipment. Moderate to high acoustical isolation is required in this room. The room's surfaces should be absorptive and include carpet, acoustical wall panels, and acoustical ceiling tiles. Ceiling tile must have a high sound isolation rating, and other sources of sound penetration, including recessed electrical boxes, doors, window mullions and thickness of glass, and ceiling system must be addressed. A white noise or sound masking system may be required to provide an appropriate environment for performances or presentations.

## **HVAC**

Temperature to be controlled at 68° and 72° when heating and 72° to 78° when cooling for energy savings. Relative humidity at 30 to 60% and ventilation at 5 to 12 cubic feet per minute per person with 3 to 10 air exchanges per hour. Ventilation must provide rapid dispersal of any heat produced by equipment or high number of occupants. Area requires individual thermostat with lockable cover. Ductwork should be baffled to prevent unacceptable noise levels.

## **Illumination**

Provide a minimum of 30 to 40 foot candles of light (with 50 foot candles preferred) at table top level in the seating areas. Provide high quality, non-glare light in the seating areas for reading and viewing computer screens. Lighting should be zoned so that a portion of the fixtures can be turned off for energy savings when natural lighting is available or when lower levels of lighting are desirable.

## **Telecommunications**

Provide one standard quad communications outlet (two voice and two data) co-located with associated power every 2 feet on the walls.. The outlets should be mounted at 15" above the finished floor for desks that are adjacent to a wall. If modular furniture is used, the communications cabling can be distributed via conduit and J-boxes with the communications outlets integrated into the furniture. There should be a ladder rack and/or conduit horizontal path to the Computer Room.

Provide one standard duplex communications outlet (one voice and one data) with associated power at each printer and fax location.



To provide universal access to power and data connections, wall-mounted receptacles and outlets can be installed no less than 15" above the finished floor for forward reach access and no less than 9" above the finished floor for side reach access, with a minimum of 30" wide x 48" deep clear floor space. If no alternatives are provided to receptacles mounted at 6" above the work surface, the depth of the work surface cannot exceed 24" for a side reach or 25" for a forward reach at accessible locations.

#### **Audio - Visual**

The computer training will be greatly enhanced by providing the ability for students to view a large screen projected image of the instructor's computer screen. This may be accomplished through the use of portable or installed equipment. Use of video monitors is not advised. Large plasma screens (50" or larger) may be used in smaller rooms. A portable projector may be positioned on a mobile cart at the front of the room. An installed projector may be mounted at the ceiling or mounted at a shelf or cabinet at the back of the room. Caution should be exercised in placing projectors at the rear of the room to ensure that light fixtures, people, furniture or other objects in the path of the projected light, do not obstruct images. Images may be displayed onto a projection screen at the front of the training room. The top of the screen should be located at least 6 inches from the top of the wall to minimize reflections off the ceiling. The bottom edge of the screen should not be lower than 4 feet from the floor to provide clear sight line to the entire screen from any seat in the room.

Use of installed projection equipment may require conduit installation for routing of cabling between the projector and the instructor's workstation. It may also be desirable to the ability to display videotape or other pre-recorded video media. Depending on the nature of the computer application being used, it may or may not be necessary to provide speakers for sound reproduction. If videotape playback capability is provided, loudspeakers and sound amplification will be required. Connections to television distribution feeds may also be appropriate.

#### **Security**

This area will be monitored by Computer Center Desk staff who are charged with its supervision. The room requires a mechanical lock and key, electronic keypad, or magnetic card reader to control access.

#### **Signage**

Required signage includes a major area directional and identification sign which can be seen from the public entrance or lobby. This directional sign ("Computer Center") must be wall-mounted or ceiling hung at least 80" high when suspended overhead on a path of travel and must have characters and numbers that are appropriately sized according to the viewing distance, but no less than 3" in height. Characters must have a width-to-height ratio of between 3:5 and 1:1 and a stroke width-to-height ratio between 1:5 and 1:10; must contrast with their background; and must be in a matte, eggshell, or other non-glare finish.

A Permanent room identification sign ("Computer Center") wall-mounted on the latch side of the doors at 60" above the finished floor with 1/32" raised uppercase sans serif characters accompanied by Grade II Braille. This room identification sign may include an "In-Use" slider panel or a sign carrier for posting schedules. Additional signage requirement includes room identification number as assigned by facilities staff.

Additional requirements include fire and life safety lighted exit signs, and may include a building floor directory or stack location map, pictogram flag signs in traffic paths for elevators or rest rooms, restriction signs (e.g., "No Food or Drink"), changeable and permanent information signs (e.g., "Internet Classes"), and donor recognition plaques.



## Furniture & Equipment and Shelving Units

	UNIT QTY	UNIT Sq. Ft.	EXTENDED Sq. Ft.
<u>Description of Furniture &amp; Equipment Units</u>			
Chair, Task	31	0	0
Computer, Public Desktop	30	0	0
Computer, Staff Desktop	1	0	0
Headphone, AV	31	0	0
Printer, Ink-Jet (Color)	1	0	0
Projection Screen, Motorized Ceiling	1	0	0
Projector, Ceiling Mounted Data	1	0	0
Scanner, Flat	1	0	0
Technology Training Table, Systems Furniture	30	30	900
Technology Training Table, Systems Furniture	1	40	40
White Board	1	0	0
White Board, Electronic	1	0	0

